

FIG. 1
PRIOR ART

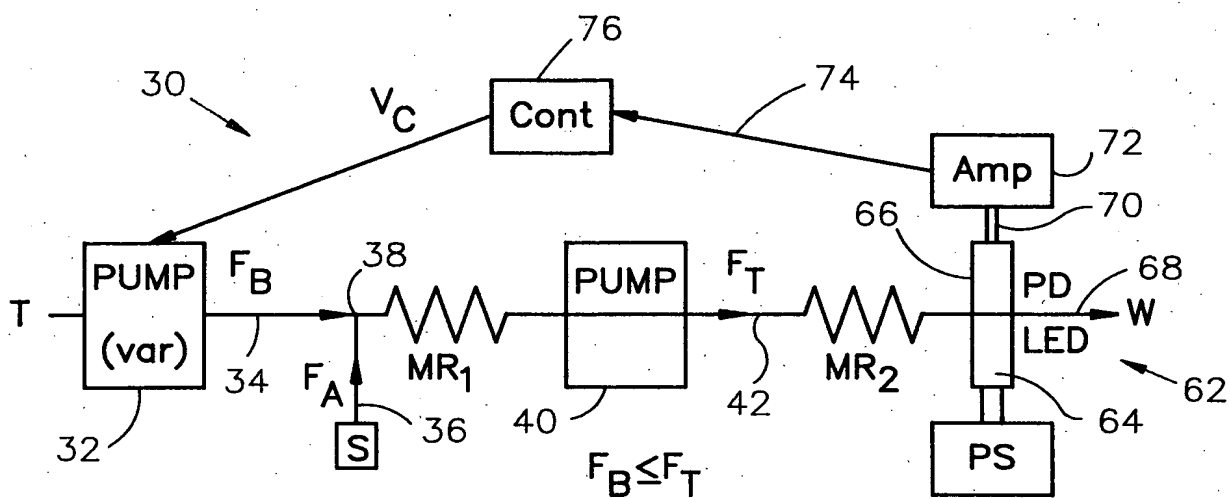


FIG. 2

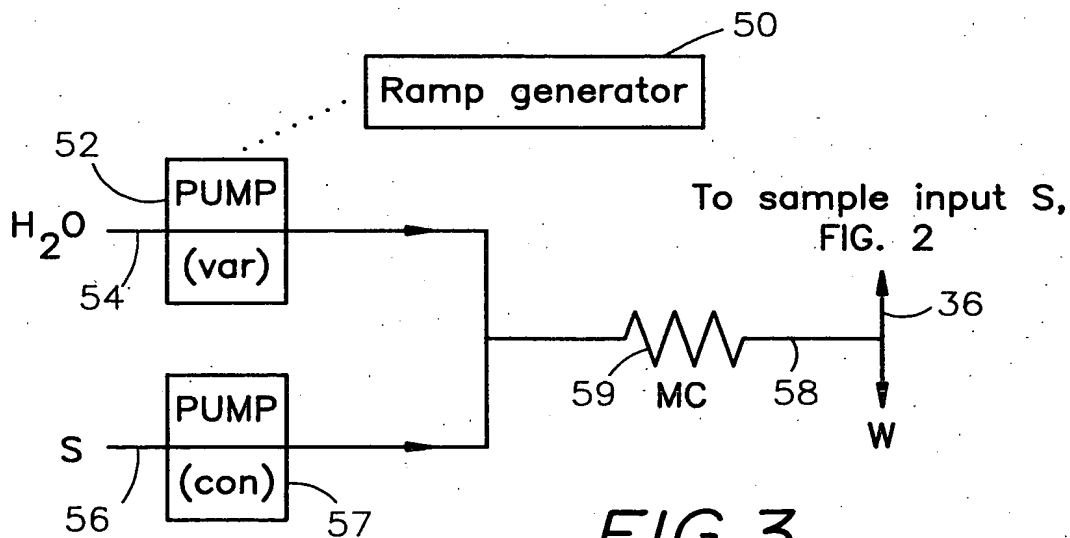
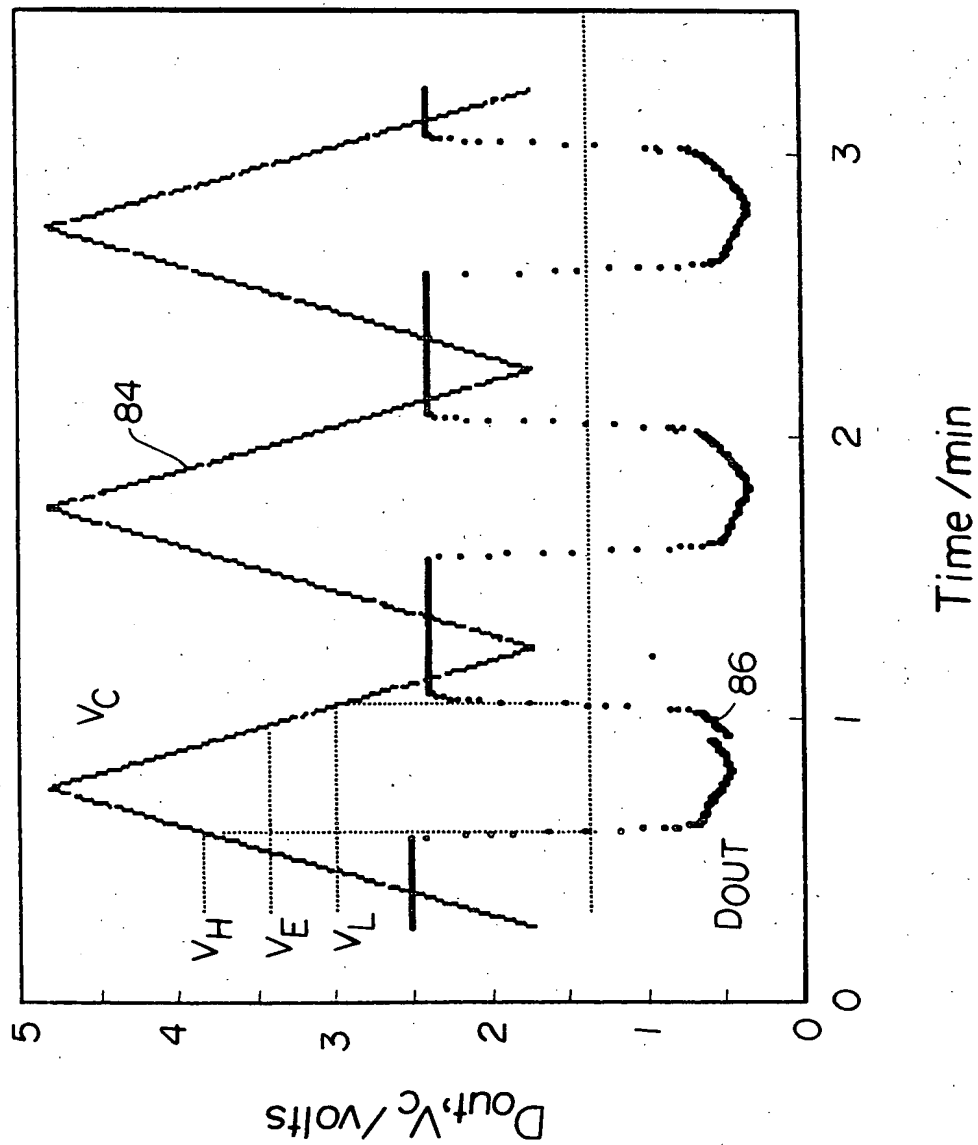


FIG. 3



FIG. 4

FIG. 5



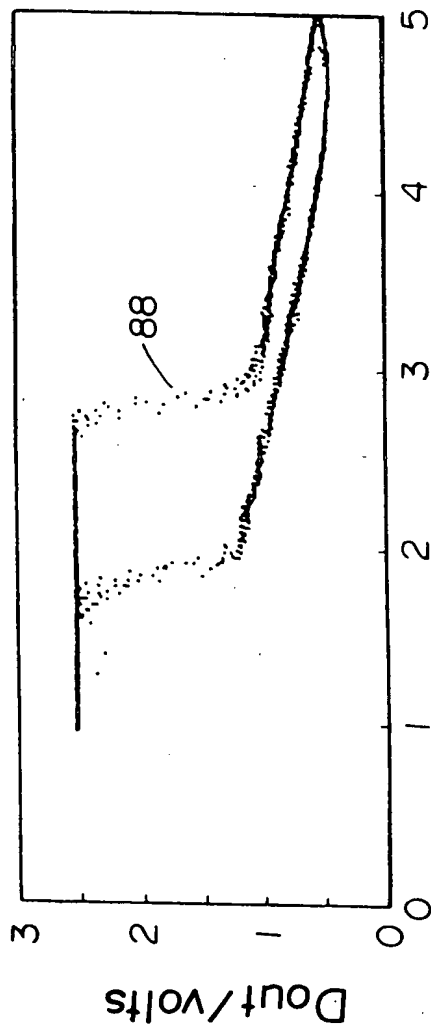


FIG. 6(a)

$V_C/volts$

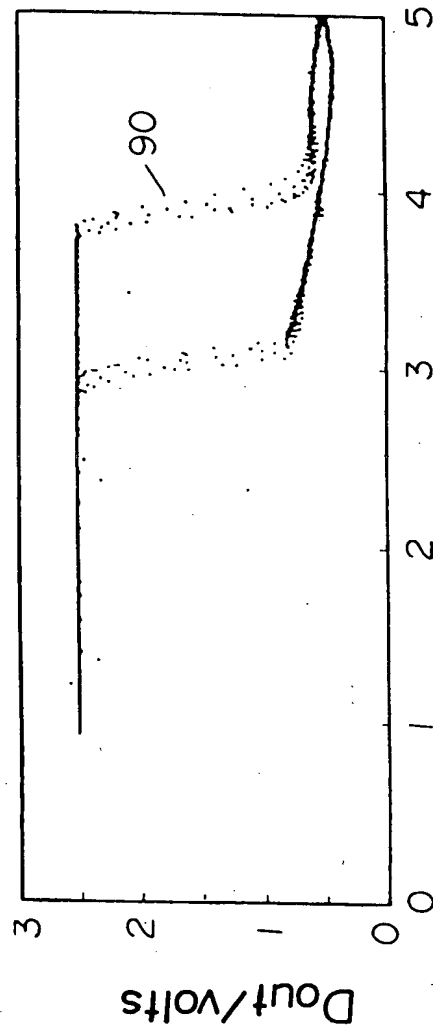


FIG. 6(b)

$V_C/volts$

FIG. 7 is a graph showing the variation of the output voltage V_{out} and the control voltage V_c as a function of time. The graph shows that the output voltage V_{out} is a square wave and the control voltage V_c is a sawtooth wave. The output voltage V_{out} is high when the control voltage V_c is high and low when the control voltage V_c is low. The control voltage V_c is high when the output voltage V_{out} is high and low when the output voltage V_{out} is low.

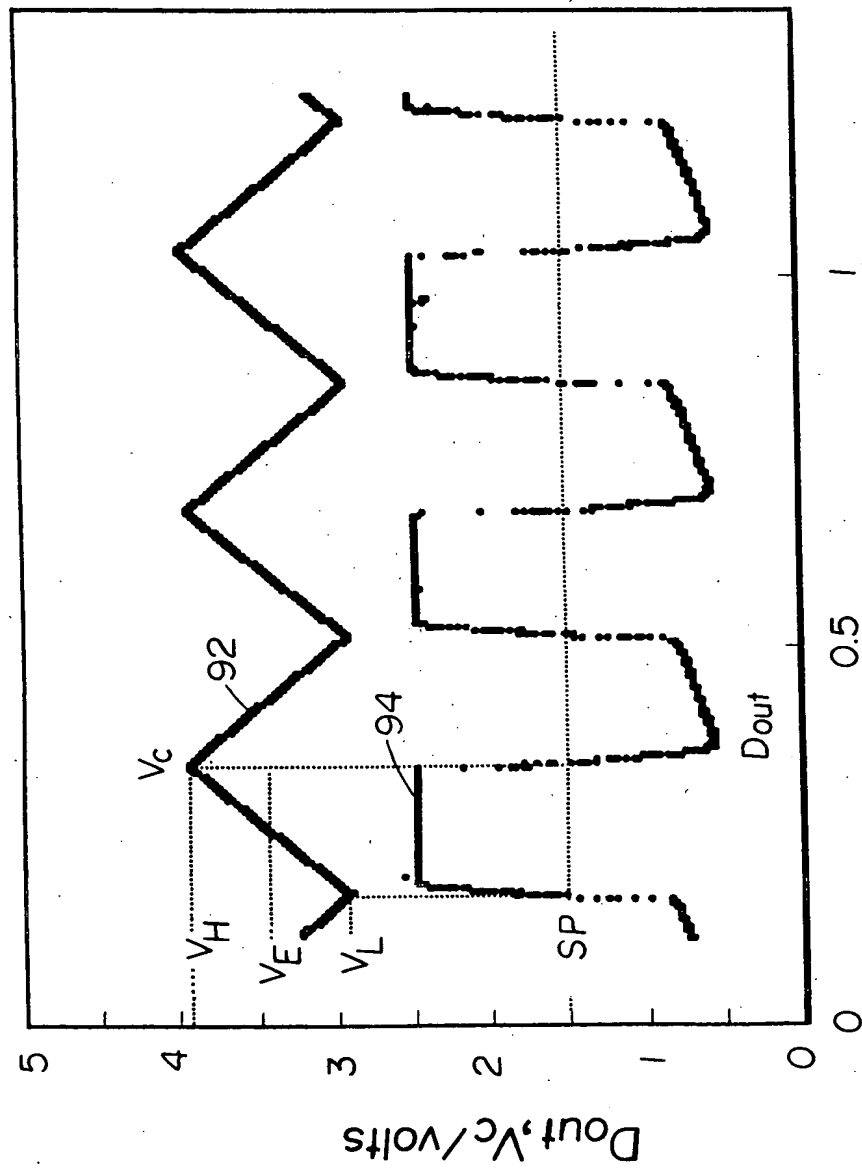


FIG. 7

FIG. 8(a) shows the variation of the output voltage V_c and the output current I_c with time. The output voltage V_c is shown as a solid line and the output current I_c is shown as a dashed line. The output voltage V_c starts at 0V at time 0, rises to a peak of about 4.5V at 20 minutes, and then falls back to 0V at 80 minutes. The output current I_c starts at 0A at time 0, rises to a peak of about 0.4A at 20 minutes, and then falls back to 0A at 80 minutes. The output voltage V_c and the output current I_c are both shown as a function of time.

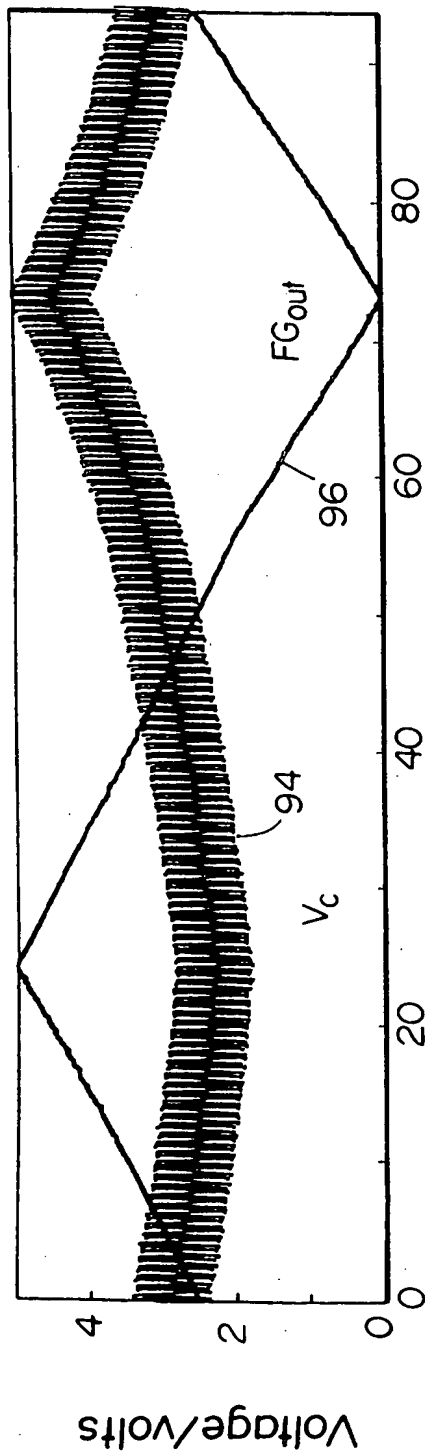


FIG. 8(a)

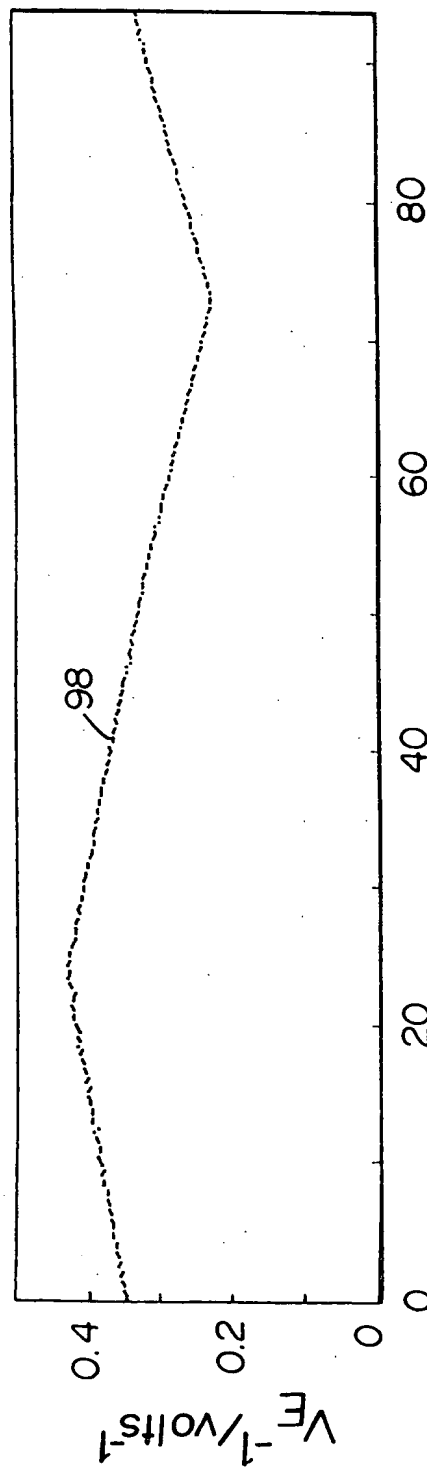


FIG. 8(b)

FIG. 9 is a graph showing the relationship between the output voltage V_{out} and the collector voltage V_C for the circuit of FIG. 8. The graph shows a sharp increase in V_{out} as V_C increases, indicating a high gain. The curve is labeled "SP" for "Signal Path".

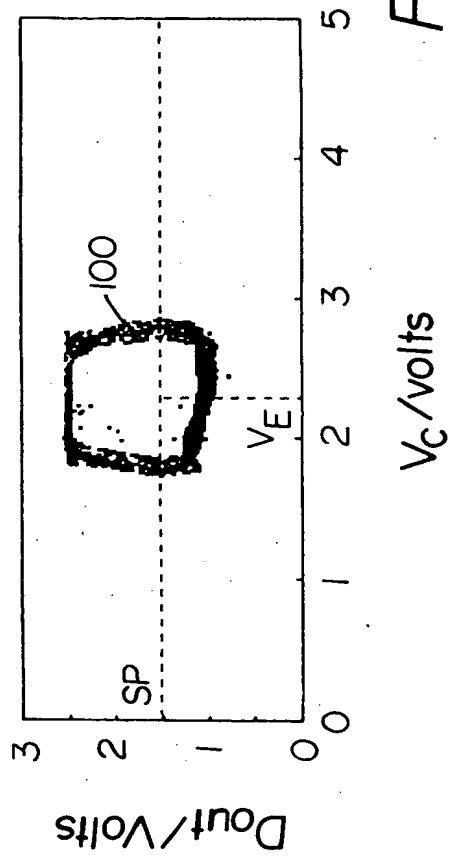


FIG. 9(a)

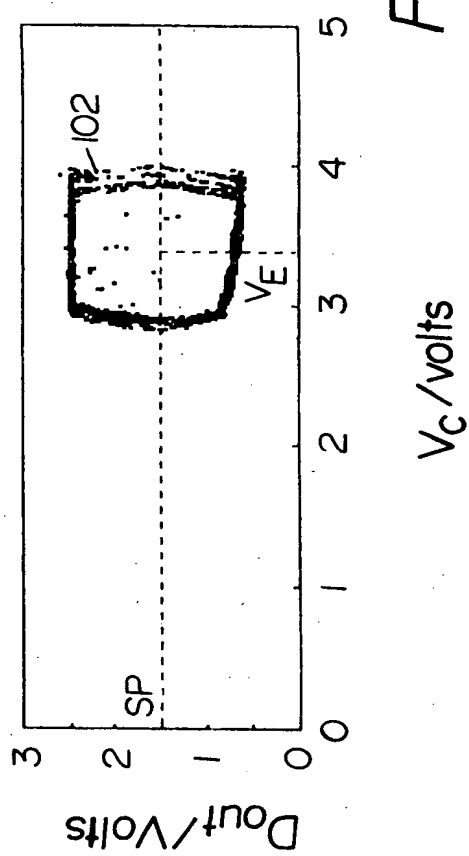


FIG. 9(b)